

Composite material for semiconductor radiator and producing method therefor

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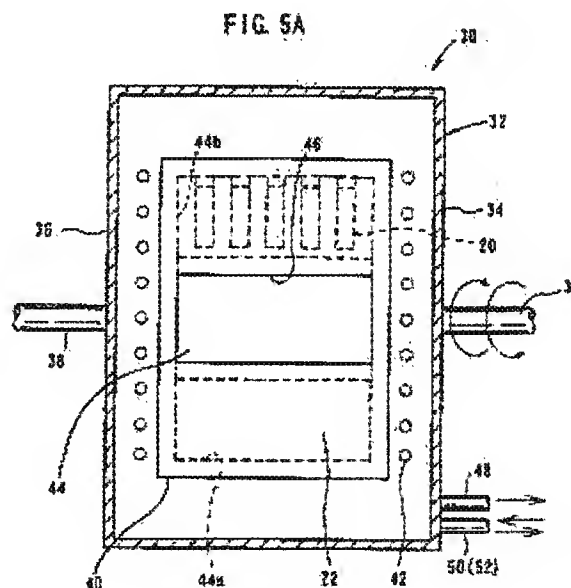
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A high-pressure vessel (30) is allowed to be in an initial state and a first chamber (44a) is disposed downward. Copper or copper alloy (22) is placed in the first chamber (44a), and SiC (20) is set in a second chamber (44b). The high-pressure vessel (30) is tightly sealed, and then the inside of the high-pressure vessel (30) is subjected to vacuum suction through a suction pipe (48). Electric power is applied to a heater (42) to heat and melt the copper or copper alloy (22) in the first chamber (44a). At a stage at which the molten copper (22) in the first chamber (44a) arrives at a predetermined temperature, the high-pressure vessel (30) is inverted by 180 degrees to give a state in which SiC (20) is immersed in the molten copper (22). An impregnating gas is introduced into the high-pressure vessel (30) through a gas inlet pipe (50) to apply a pressure to the inside of the high-pressure vessel (30). Thus, SiC (20) is impregnated with the molten copper (22). The high-pressure vessel (30) is inverted by 180 degrees, and then the impregnating gas in the high-pressure vessel (30) is discharged through a gas outlet pipe (52), simultaneously with which a cooling gas is introduced into the high-pressure vessel (30) through the gas inlet pipe (50) to cool the high-pressure vessel (30).



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